

Title (en)  
Control device for internal combustion engine

Title (de)  
Steuervorrichtung für eine Brennkraftmaschine

Title (fr)  
Dispositif de commande de moteur à combustion interne

Publication  
**EP 1548255 A1 20050629 (EN)**

Application  
**EP 04030264 A 20041221**

Priority  
JP 2003430781 A 20031225

Abstract (en)  
An object of the present invention is to restrain a deterioration of emission even if the actual control condition including the required torque is different from the set control condition. An ECU (5) establishes a control amount of an EGR valve (42) in such a manner that a condition amount, which is a control parameter controlling the EGR valve (42), is established as a target value. The ECU (5) selects the condition amount as the control parameter among a fresh-air amount, an exhaust oxygen concentration, and an intake oxygen concentration, in which an operation amount of the EGR valve (42) is minimum. <IMAGE>

IPC 1-7  
**F02D 41/00**; **F02D 21/08**

IPC 8 full level  
**F02D 45/00** (2006.01); **F02D 21/08** (2006.01); **F02D 41/00** (2006.01); **F02D 41/04** (2006.01); **F02D 41/14** (2006.01); **F02D 41/18** (2006.01); **F02M 25/07** (2006.01); **F02D 13/02** (2006.01)

CPC (source: EP KR US)  
**F02D 41/0052** (2013.01 - EP US); **F02D 41/04** (2013.01 - KR); **F02D 41/144** (2013.01 - EP US); **F02D 41/1441** (2013.01 - EP US); **F02D 41/1458** (2013.01 - EP US); **F02D 41/1497** (2013.01 - EP US); **F02D 41/182** (2013.01 - EP US); **F02M 26/05** (2016.02 - EP US); **F02M 26/23** (2016.02 - EP US); **F02M 26/46** (2016.02 - EP US); **F02M 26/53** (2016.02 - EP US); **F02D 13/0215** (2013.01 - EP US); **F02D 41/1454** (2013.01 - EP US); **F02D 2200/0402** (2013.01 - EP US); **F02D 2200/0406** (2013.01 - EP US); **F02D 2250/18** (2013.01 - EP US); **F02M 26/10** (2016.02 - EP US); **F02M 26/33** (2016.02 - EP US); **Y02T 10/40** (2013.01 - EP US)

Citation (search report)

- [X] US 2003192517 A1 20031016 - GATES FREEMAN CARTER [US], et al
- [A] US 2003188727 A1 20031009 - VAN NIEUWSTADT MICHEL J [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 397 (M - 655) 25 December 1987 (1987-12-25)

Cited by  
US8024106B2; US9297531B2; WO2011018115A1; WO2007071463A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 1548255 A1 20050629**; **EP 1548255 B1 20060906**; CN 100467842 C 20090311; CN 1637254 A 20050713; DE 602004002267 D1 20061019; DE 602004002267 T2 20070913; JP 2005188392 A 20050714; JP 4251073 B2 20090408; KR 100680683 B1 20070209; KR 20050065401 A 20050629; US 2005139193 A1 20050630; US 7150264 B2 20061219

DOCDB simple family (application)  
**EP 04030264 A 20041221**; CN 200410103686 A 20041224; DE 602004002267 T 20041221; JP 2003430781 A 20031225; KR 20040111596 A 20041224; US 1232804 A 20041216